- 7. Malacomyza westwoodi: fore wing.
- 8. Coniopteryx angustus: male genitalia.
- 9. Parasemidalis flaviceps: fore wing.
- 10. Coniopteryx vicina: male genitalia.
- 11. Malacomyza farinosa: fore wing.

In the discussion which followed Doctor Ashmead stated that he had found Coniopteryx feeding on a red spider (Tetranychus) on rose leaves. He had also found it eating aphides.

May 10, 1906.

The 205th regular meeting was held at the residence of Mr. O. Heidemann, 531 Randolph street, N. W., Petworth, D. C. Vice-president Hopkins occupied the chair and there were present Messrs. Busck, Caudell, Currie, Hopkins, Knab, Patten, and Piper, members, and Mr. Douglas H. Clemons, visitor.

Mr. W. W. Yothers, of the Bureau of Entomology, U. S. Department of Agriculture, was elected a corresponding member.

The Executive Committee reported that they had rented a room of the Security Storage Company, of Washington, D. C., for the storage of the publications of the Society.

Doctor Hopkins reported finding the larva of *Pissodes dubius* Rand. in balsam fir in New Hampshire, in the splintered portion of storm-broken trees. There was none of this species, however, in the trees which died of a root fungous disease. The work of *Dendroctonus piceaperda* Hopk. was found at altitudes above 2,000 feet, but none below. Old galleries were observed which must have been made some thirty or forty years ago.

Mr. Busck presented the following paper:

NEW AMERICAN TINEINA.

By August Busck.
Family YPONOMEUTIDÆ.

Choreutis schausiella, n. sp.

Antennæ blackish brown, checkered above with white, and with long ochreous cilia. Labial palpi dark brown, liberally sprinkled with white

scales on second joint and in the tuft; terminal joint dark, Head and thorax dark brown. Basal half of fore wings ochreous brown, very sparsely sprinkled with white scales; in this brown part is a narrow oblique fascia of bluish metallic scales from basal third of costa to the middle of the dorsal edge; this fascia is joined in the middle of the wing by another bluish metallic streak from the middle of costa and together they form a perfect though not very distinct Y. Just beyond the middle of the wing the basal unspeckled part is rather sharply terminated and the rest of the wing is profusely speckled with ochreous white. At tornus is a large, deep-black, elongate quadrangular spot, divided in the middle by a narrow perpendicular ochreous-brown line; the basal part of the spot contains a large center of bluish metallic scales, and the apical part contains a perpendicular line of such scales. The nearly unspeckled extreme apical part of the wing is rich olivebrown, with a thin line of bluish metallic scales along the edge of the wing from near costa to the tornal spot. Cilia dark olive-brown, dotted with white scales. Hind wings white, with tip and edges dark fuscous; cilia dark fuscous, with an indistinct whitish line parallel with the edge of the wing. Abdomen dark fuscous above, each joint tipped with lighter ochreous and silvery scales. Underside of body and legs profusely sprinkled with white scales; spurs white; tarsi annulated with ochreous white.

Alar expanse, 9.5-10 mm.

Las Vegas, New Mexico (Schaus).

Type.—No. 9888, U. S. National Museum.

Nearest Choreutis occidentella Dyar and very similar in ornamentation, differing in the smaller size, in the absence of the indistinct whitish fascia at basal third, and in the white hind wings. I have specimens of this species from Jalapa, Mexico, and from Mr. Schaus's collection. It gives me pleasure to dedicate this species to Mr. William Schaus, whose extensive collections of American Microlepidoptera, so liberally donated to the U.S. National Museum, will be subjects for study for a long time to come.

Pliniaca, n. gen.

Antennæ one-half times as long as the fore wings. Upper and anterior sides covered with scales, underside with a short pubescence; basal joint with pecten. Labial palpi short, ascending; second joint shortly tufted beneath; terminal joint pointed. Maxillary palpi obsolete. Tongue very long. Head roughened, face with loosely appressed scales. Fore wings three times as long as wide, obtusely pointed; 12 veins, all separate; vein 7 to termen; 2 and 3 distant; 3, 4, and 5 approximate; secondary cell bearing veins 8, 9, and 10; internal vein to between 6 and 7. I b furcate at base; membrane at costal edge between veins 9 and 12

thickened. Hind wings elongate-ovate, as wide as the fore wings; 8 veins, all separate; vein 2 distant from 3, which is omitted at corner of cell; veins 3, 4, 5, and 6 nearly equidistant, parallel; internal vein with one fork above 4 and one above 6. Posterior tibiæ smooth.

Type: P. bakerella Busck.
The genus is not far removed from Eucalantica Busck.

Pliniaca bakerella, n. sp.

Antennæ yellowish fuscous. Palpi, face, head, and thorax reddish ochreous, sprinkled with straw-yellow. Fore wings straw-yellow, suffused and streaked with reddish ochreous; the reddish color is aggregated along the basal half of costa, in a broad ill-defined longitudinal streak on the disc and along the dorsal edge; the outer third of the wing beyond the cell is irregularly and sparsely suffused with the same color. Cilia light straw-yellow. Hind wings dark fuscous. Abdomen and legs dark fuscous, sprinkled with straw-yellow.

Alar expanse, 19 mm.

Claremont, Cal. (C. F. Baker).

Type.—No. 9889, U. S. National Museum.

Named in honor of the collector, Mr. C. F. Baker, of the Estacion Agronomica, Santiago de las Vegas, Cuba, who has sent me this and the following species, besides several other interesting Microlepidoptera.

Pliniaca sparsisquamella, n. sp.

Entire insect except the hind wings chalky white. Fore wings with large loosely attached scales; when at all rubbed the yellow skin of the wing gives the species the appearance of being oily. Hind wings rather dark fuscous. Legs and body immaculate white.

Alar expanse, 16-17 mm.

Claremont, Cal. (C. F. Baker).

Type.—No. 9890, U. S. National Museum.

This insect reminds one, in general habitus, of the genus Tegeticula Zeller [Pronuba Riley, nec Thomson].

Family GELECHIIDÆ.

Paltodora pennella, n. sp.

Antennæ white, with sharp, black annulations. Labial palpi pure white, brush on second joint with a few black hairs interspersed. Face, head, and thorax pure white. Fore wings light ochreous, with the extreme costal edge and a narrow longitudinal streak on the fold white. From apical fifth of costa runs a faint oblique white streak across the

wing to termen; on the middle of the fold is a short longitudinal black streak, above this in the cell is a larger longitudinal streak, and at the end of the cell is a third very short black streak or dot. A few single black scales are sprinkled over the apical half of the wing along costal and dorsal edge. Cilia pure white, with base, tip, and two transverse lines black. Hind wing light ochreous fuscous. Abdomen ochreous. Anterior legs white, with a longitudinal black line through their entire length; posterior legs pure white, tarsi shaded with ochreous and with each joint tipped with black.

Alar expanse, 15 mm.

Bright Angel, Ariz. (H. S. Barber).

Type.—No. 9891, U. S. National Museum.

The species is closest to *Paltodora magnella* Busck, but smaller, brighter ochreous in color, and without the costoapical white dashes. The peculiar ornamentation of the fore legs makes easy the distinction of this species from all described American species of the genus except *dietriella* Busck, which has a similar ornamentation not mentioned in the description. The wing color and markings, however, separate it from this rather dark ochreous species.

Sophronia primella, n. sp.

Antennæ shining dark brown, without color annulations. Labial palpi whitish, mottled with ochreous fuscous, especially on the exterior side and in the large well-developed brush. Face whitish. Head and thorax whitish ochreous, strongly mottled with dark ochreous and fuscous scales. Fore wings ochreous, mottled and longitudinally streaked with white, black, and fuscous. Costal edge from base to apical third white, edged below by a narrow streak strongly mottled with fuscous. Below it is a nearly unmottled area of clear ochreous, reaching to the middle of the wing and only transversed by a single dark line on the subcostal vein. From base through the center of the wing run close beside each other two parallel black lines, interrupted at the end of the cell by a round brown dot, but continued on the other side nearly to a small round black dot at apex. The dorsal part of the wing is rather freely dusted with white and brown scales and on the middle of the fold is an oblong brown dot. Cilia long, white, with two dark lines parallel with the edge of the wing and with a long thin deep black pencil at apex, which is slightly falcate. Hind wings light ochreous fuscous; cilia light ochreous. Abdomen dark fuscous. Legs ochreous, tarsi annulated with black.'

Alar expanse, 17 mm.

Arizona, Colorado, Texas(?).

Type.—No. 9892, U. S. National Museum.

This is the first record in America of this interesting European genus. I have been unable to examine the type of the genus Illustrella Hübner, but presume that the other species placed with it in this genus by Rebel are truly congeneric, and the present American species has the same general habitus and the identical oral and venational characters as these. The venation is as follows: Fore wings, 12 veins, 7 and 8 stalked to costa, rest separate; hind wings, 8 veins, 3 and 4 closely approximate or connate (in *primera* approximate), 5 nearest 4, 6 and 7 stalked.

I have long had the type of this species, but have been in doubt about its locality label, which reads: "From Boll, Texas." Such labels were placed, during a short period, on Microlepidoptera from any locality by a young inexperienced worker in the Department of Agriculture and are consequently not dependable. Some European specimens, for example, bear such a label. I have, however, examined and determined specimens from Cochise County, Ariz., and from Denver, Colo., for my friend, Doctor W. G. Dietz, and have thus

at least two good localities for the species.

I have met with another species of this genus, collected in New Jersey, but have not sufficient material to properly describe it at present.

Telphusa velatella, n. sp.

Antennæ silvery white, with black annulations. Second joint of labial palpi white, speckled and barred with black; terminal joint white, with two ill-defined black annulations, one around the middle and one just before the tip; brush short, divided. Face iridescent white. Head and thorax white, sprinkled with dark fuscous scales. Fore wings clothed with very long, narrow speckled scales; ground color white, heavily overlaid with ochreous and fuscous on the basal two thirds of the wing; the apical third is also sprinkled with dark scales, but to a less extent and appears quite light contrasted with the basal part. Near base is an oblique, outwardly directed, black costal streak, reaching the fold and followed by a white space only slightly sprinkled with dark scales. There are two longitudinal rows of tufts of raised scales, one through the middle of the wing with the first tuft at basal third, the second on the middle of the wing, and the third at the end of the cell; the other row with two tufts below the fold and the third just below the end of the cell. Hind wings light fuscous. Legs white, barred with black; tarsi black, each joint tipped with white.

Alar expanse, 14 mm.

Williams, Ariz., July (H. S. Barber). Type.—No. 9893, U. S. National Museum.

Intermediate in coloration between Telphusa basifasciella Zeller and T. belangerella Chambers, but distinguished from both by the presence of the tufts of raised scales.

Gelechia triangulella, n. sp.

Antennæ purplish fuscous, with black annulations. Second joint of labial palpi iridescent roseate white, sparsely dusted with dark fuscous especially on the brush, which is short and divided, longest at base and tapering towards apex; terminal joint blackish fuscous. Face pale fuscous, strongly iridescent. Head and thorax dark fuscous. Fore wings with light fuscous ground color heavily overlaid with dark fuscous scales, and with a roseate tinge. On the middle of the cell is a blackish triangular spot with one point touching the fold and preceded basally by a few ochreous scales; at the end of the cell is a similar blackish triangular spot; the edges of both spots are faintly continued to the costal edge. Apical third of the wing heavily overlaid with blackish scales. Cilia roseate, sprinkled with black scales. Hind wings light silvery fuscous; veins 6 and 7 nearly parallel, veins 3 and 4 short-stalked. Abdomen ochreous-fuscous. Legs ochreous, mottled on their outer sides with black scales.

Alar expanse, 12-13 mm.

Bright Angel and Williams, Ariz., June and July (H. S. Barber).

Type.—No. 9894, U. S. National Museum.

This is a rather inconspicuous dark species, not very near to any described American species, but probably most easily placed with the few other roseate species, from which it is easily separated by the two large triangular discal markings.

One specimen bears Mr. Barber's label, "common in rats'

nest."

Gelechia kincaidella, n. sp.

Antennæ unicolored, dark fuscous. Labial palpi light ochreous, with base of second joint brown and with outer side and tip of apical joint slightly shaded with brown; brush on second joint well developed, but not divided, largest at base, gradually shorter towards apex. Face whitish ochreous. Head and thorax whitish-ochreous, patagia dark brown. Fore wings light ochreous, with a slight tendency toward reddish in the apical part. Costal base, a large semicircular costal spot before the middle of the wing, and a large discal spot at the end of the cell dark brown, with the light ground color as narrow channels between the spots. The large brown spot at the end of the cell is

irregularly pentagonal, with the longest and sharpest point towards apex and with the upper corner touching the costal edge. The apical and terminal edges of the wing are strongly dusted with black and brown scales. Hind wings dark fuscous. Abdomen and legs ochreous. Venation typical.

Alar expanse, 23 mm.

Rock Spring, Wyo. (T. Kincaid). *Type*.—No. 9895, U. S. National Museum.

This large handsome species is most nearly allied to Gelechia paulella and G. aristella, but not mistakable for either. It gives me pleasure to dedicate it to the collector.

Paralechia californica, n. sp.

Antennæ white, with narrow black annulations. Labial palpi silvery white; second joint with a small black dot exteriorly; terminal joint with a black annulation near base and one near the apex; brush well developed, pure white. Face and head silvery white. Thorax white, tipped posteriorly with black. Fore wings silvery white, with extreme base of costa black and with three ochreous oblique costal streaks edged with black, one of which is rather indistinct near the base, another on the middle of the wing more pronounced, and one at apical third; these streaks terminate at about the middle of the wing, except the last, which runs across the wing. There are six conspicuous tufts of raised black scales in two longitudinal rows on the middle of the wing. Dorsal part of the wing pure white, apical overlaid with ochreous and black scales; the interval between it and the last costal streak appears as a narrow angulated white fascia. Hind wings light fuscous, cilia yellowish. Abdomen and legs white; tarsal joints annulated with black.

Alar expanse, 15 mm.

Los Angeles, Cal. (D. W. Coquillett). Type.-No. 9896, U. S. National Museum.

A striking species, which reminds one of Mompha eloisella Clemens, but which can not be confused with any described American gelechiid.

Trichotaphe barnesiella, n. sp.

Antennæ purplish black, shortly ciliated. Second joint of labial palpi dark purplish fuscous, terminal joint ochreous. Head blackish brown, with purplish reflections; face somewhat lighter, iridescent. Thorax blackish brown, patagia light creamy yellow. Fore wings with costal half light creamy yellow in striking contrast to the dorsal half, which is purplish brown; the two colors are sharply divided in the middle of the wing; the yellow costal part which reaches nearly but not quite to apex has two slight serrations projecting into the dark dorsal part. Cilia blackish. Hind wings dark fuscous. Abdomen dark fuscous, in the female with protruding hairy horny ovipositor. Legs black exteriorly, ochreous on the inner side.

Alar expanse, 17 mm.

Redington, Ariz.

Type.—No. 9897, U. S. National Museum. Cotypes in Dr. Wm. Barnes's collection.

Named in honor of Dr. Wm. Barnes, of Decatur, Ill., to whom I am under obligations for this and many other interesting Microlepidoptera. This striking species is very similar to Trichotaphe serrativitella Zeller and has nearly the identical pattern and coloration of the fore wings, but it is at once disringuished from this eastern species by its dark head and palpi.

Family STENOMIDÆ.

Stenoma mistrella, n. sp.

Antennæ in the male strongly ciliate, in the female simple; dark purplish fuscous. Labial palpi long, recurved, smooth, light ochreous gray; underside of second joint slightly thickened with somewhat darker scales. Face, head, and thorax light ochreous gray. Fore wings light ochreous minutely speckled and overlaid with darker brown scales; at the end of the cell is a small but conspicuous round black dot; cilia light ochreous; the costal edge is nearly straight and apex is pointed; venation typical with 12 separate veins, 7 to termen. Hind wings with 8 veins, 6 and 7 stalked, 3 and 4 connate, 5 approximate to 4; dark fuscous. Abdomen dark fuscous. Anterior legs blackish in front; legs otherwise smoky ochreous.

Alar expanse, 20-23 mm.

St. Louis, Mo. Described from five specimens collected by Mr. H. McEhlose and by the writer in September, 1904.

Type.—No. 10708, U. S. National Museum.

The present genus and Brachyloma, Clemens (Ide, Chambers) do not belong to the family Xyloryctidæ as tentatively placed in Doctor Dyar's Catalogue, but form a separate family to which Mr. Meyrick has given the name Stenomidæ. This family is the predominating one among the Microlepidoptera of South America.

Family ŒCOPHORIDÆ.

Ethmia macelhosiella, n. sp.

Antennæ blackish brown. Second joint of labial palpi black, with white base; terminal joint white, mottled posteriorly with black scales. Face black. Head white, with a black dot on vertex. Thorax white, with black longitudinal central line. Patagia white, with black bases and tips. Fore wings white, more or less overlaid with fuscous; from base to apex is a deep black longitudinal central streak; the costal part of the wing above this streak is somewhat darker than the dorsal part. The streak is interrupted, though not entirely broken, at the end of the cell by a pure white dash and it is edged dorsally from base to beyond the middle by a narrow longitudinal interrupted line of bright orange scales. A few black scales are scattered over the light portion of the wing and tend in the apical part to form narrow longitudinal streaks. Along the dorsal edge is a row of black dots before the cilia, which are white. Hind wings light fuscous. Abdomen dark fuscous. Legs black with white annulations.

Alar expanse, 27 mm.

St. Louis, Mo. (H. A. McElhose).

Type.—No. 9898, U. S. National Museum.

Named in honor of the collector, my friend, Mr. H. A. McElhose, who has sent me this and other interesting Microlepidoptera. The species is nearest *Ethmia subcærulea* Walsingham, but at once distinguished from this and all described American species of the genus by the prominent central longitudinal black streak.

Ethmia umbrimarginella, n. sp.

Antennæ deep purplish black. Labial palpi black; rather more weakly developed than is typical of the genus and with long spreading brush of thin black hairs on the second joint. Tongue coiled, black. Face, head, and thorax deep black. Fore wings dark mouse-gray, with white costal edge and a central longitudinal streak of bright reddish orange from base to near the end of the cell. At the end of the cell is a large oblong deep black spot divided in the middle by a transverse, bright orange dash. On the middle of the wing just above the longitudinal orange streak is a small round deep black dot and preceding it below the orange streak is a larger round black dot. Between this last dot and the base of the wing is a short longitudinal black streak edging the orange. Cilia gray. Hind wings chalky white, with a broad dark gray border all around the edge, cilia gray. Abdomen blackish brown. Legs unicolored dark brown.

Alar expanse, 20 mm.

Las Cruces, New Mexico (T. D. A. Cockerell). Professor Cockerell informs me that the species was taken February 22 on canaigre (Rumex hymenosepalus) in Mesilla Park.

Type.—No. 9899, U. S. National Museum.

This and the following species belong to the group of the genus Ethmia which is represented by the European *pyrausta* Pallas. The species of this group, which probably should be given generic rank, differ from the typical species of Ethmia in the scantier, more hair-like scaling and in the somewhat shorter and weaker labial palpi, which are not smooth as in the typical forms, but covered with a more or less strongly developed brush of thin hairs on the under side of second joint.

None of the hitherto described American species belongs in this group. The present species is nearest the European aurifluella Hübner, but differs in the unicolored abdomen and in the presence of the orange ornamentation of the fore wings. This and the following species are at once distinguished from all American and European species by their striking white,

dark-bordered hind wings.

Ethmia coquillettella, n. sp.

Antennæ purplish black. Labial palpi black, with base of both joints white; second joint with short rough brush beneath. Lower part of face and the region below the eyes white; vertex black. Thorax dark brown; tips of patagia white. Fore wings mouse-gray, somewhat lighter than in the preceding species; at base is an inconspicuous lightvellow spot edged exteriorly with black. Just outside it is a longitudinal deep black dot on the fold and on the middle of the fold is another similar dot. On the middle of the wing is a third similar black dot and at the end of the cell is a fourth somewhat larger black spot, divided in the middle by a large round white or very pale yellow dot. Cilia concolorous with the wing. Under side of fore wing dark gray, with the white second discal spot prominently shining through. Hind wings clear pearly white, with a broad dark gray border on apical and tornal edges but not on costa nor on the base of the dorsal edge. Abdomen above dark fuscous, with bright ochreous anal segment; under side with each joint tipped with white. Legs black, sprinkled with silvery-white scales; tarsal joints tipped with white.

Alar expanse, 15 mm.

Los Angeles, Cal. (D. W. Coquillett). *Type.*—No. 9900, U. S. National Museum.

This species is nearest to the foregoing, but much smaller and differs otherwise in the shorter brush on the labial palpi, in the absence of the yellow discal streak on the fore wing, by the incomplete dark border on the hind wings, and by the ornamented abdomen and legs. Named in honor of the collector, who has added many interesting species of Microlepidoptera to the Museum collection.

Family ELACHISTIDÆ.

Mompha pecosella, n. sp.

Antennæ dark fuscous, with narrow black annulations. Labial palpi white; second joint thickly sprinkled with black scales, especially on the exterior side; terminal joint with two black annulations, one near base, the other just before apex. Face iridescent, white. Head white, sprinkled with dark fuscous scales. Thorax dark fuscous. Fore wings blackish brown, irregularly and sparsely sprinkled with white scales and indistinctly streaked with lighter brown longitudinal lines. From costal base runs an outwardly oblique ridge of raised scales across the wing; the basal portion of the wing, limited by this ridge, is strongly mottled with white scales; just before the middle of the costa begins another oblique ridge of raised scales, parallel with the first, but not so complete, consisting of small separate tufts, of which the largest is on the fold. Below the end of the cell is a large tuft of raised scales. surrounded by scattered white scales. Hind wings dark fuscous. Abdomen fuscous above, ochreous on the under side. Legs blackish, sprinkled with ochreous.

Alar expanse, 12-13 mm.

Pecos, New Mexico, June (T. D. A. Cockerell). Type.—No. 9901, U. S. National Museum.

This species is quite close to *Mompha murtfeldtella* Chambers, but it is smaller and the basal part of the fore wings is mottled, not pure white as in *murtfeldtella*; the light colored thorax also distinguishes that species from the present. With wings folded this insect looks like a Recurvaria.

Mompha iridella, n. sp.

Antennæ dark brown, with indistinct silvery white annulations. Labial palpi white, terminal joint shaded in front and at apex with golden fuscous. Head and face white. Thorax fuscous, iridescent. Fore wings light golden brown, overlaid with iridescent white and blue scales. A triangular spot near base of costa, another on the middle of costa, and a third larger costal spot between the latter and apex silvery white; the two last costal spots are edged exteriorly with blackish scales. Between the fold and the dorsal edge are two or three small tufts of erect iridescent scales; similar small tufts are found on the middle of the wing and one at the end of the cell; just below the latter is a larger dark brown iridescent scale tuft. Tip of apical cilia white, cilia otherwise light yellowish fuscous. Hind wings dark bronzy fuscous, cilia a shade lighter. Abdomen bronzy fuscous. Legs whitish, barred exteriorly with fuscous.

Alar expanse, 13-14 mm.

Claremont, Cal. (C. F. Baker).

Type.—No. 9902, U. S. National Museum.

This is a brilliant little moth of iridescent golden and silvery scales, nearest to Mompha sexnotella Chambers. Venation and oral characters typical.

Family TINEIDÆ.

Marmara opuntiella, n. sp.

Face and head silvery white. Antennæ fuscous. Labial palpi white, with apex of second joint and a ring around terminal joint black. Maxillary palpi vellowish. Thorax and fore wings vellowish fuscous mottled with black; at basal third of fore wing is a narrow straight transverse white fascia, edged basally with black; at the middle of the wing is a similar slightly oblique white fascia and at apical third are a costal and an opposite dorsal white spot nearly reaching each other; just before apex is a white costal spot. Hind wings dark fuscous. Abdomen fuscous, with ochreous anal appendages. Legs white, with black annulations.

Alar expanse, 7-8 mm.

Southern Texas. Foodplant, Opuntia sp.

Type.—No. 9903, U. S. National Museum. Bred by Mr. E. S. G. Titus in the Insectary of the U. S. Department of Agriculture from an Opuntia received during the winter of 1904-5. The larva mines just under the epidermis, making a long winding serpentine mine sometimes widened out into irregular blotches. The larva, like those of the other species of the genus, is footless, much flattened and incised between the joints while in the mine. At the last larval molt it assumes the cylindrical form with normal legs and spins the characteristic cocoon with the peculiar globular ornamentations, as do the other species of the genus.

Ectædemia, n. gen.

Head and face tufted. Antennæ 3, simple in both sexes, rather thick; basal joint concave and dilated to form a small, strongly scaled eye-cap. Labial palpi well developed, porrected. Maxillary palpi long, folded. Tongue obsolete. Fore wings elongate-ovate, pointed, thickly clothed with scales; 8 veins, veins 3, 4, 5, and 9 absent; cell very short, closed; 6 to termen; 7 and 8 stalked to costa, with stalk out of 6; 1b simple at base. Hind wings nearly as long and 3/4 as wide as fore wings, elongate-ovate, pointed; 5 veins, veins 3, 4, and 5 absent; cell open between 2 and 6; 6 and 7 stalked from basal fourth of the wing, diverging widely, one running along costal and one along dorsal edge of the wing and approaching each other at apex; vein 2 simple; vein 1c perceptible. Posterior tibiæ clothed with stiff hairs above; middle spurs near but below middle of tibia.

The genus is very close to Nepticula Zeller, but that homogeneous genus of leaf-mining moths will not allow the gall-making populella within its limits. The main structural differences which separate Ectædemia are the smaller eye-cap, the somewhat more strongly developed labial palpi, the closed cell in the fore wings, and the spurs on the posterior tibiæ—which are situated near but below the middle. I am pleased that my views coincide with those of Dr. Edw. Meyrick, to whom I showed specimens while at his home in Marlborough.

Type: E. populella, n. sp.

Ectœdemia populella, n. sp.

Antennæ dark cupreous brown, basal joint forming a small eye-cap enlarged by heavy light yellow scaling. Face and head reddish ochreous. Thorax dark brown. Fore wings unicolored shining dark cupreous brown, with strong green and violet iridescence according to the light. Hind wings lighter cupreous brown, with ochreous cilia. Abdomen shining dark fuscous. Legs ochreous-fuscous with a bluish metallic sheen.

Alar expanse, 7-8.5 mm.

Massachusetts; New Hampshire. Food plant, Populus.

Type.—No. 9904, U. S. National Museum.

Described from a very large series of moths bred in the insectary of the U. S. Department of Agriculture from galls on the petiole of leaves of poplar received in September, 1884, from Miss C. H. Clarke, Jamaica Plains, Mass., and from A. Koebele at Holderness, N. H. The following are extracts from Mr. Theo. Pergande's notes on the species:

Each gall contains a single larva, which when mature is 8 mm. Iong and pale yellow, with pale brown head, mandibles darker, and posterior margin of anal shield brown. Legs only rudimentary and can be entirely withdrawn from view.

The gall is almost globular, of about the size of a pea, and is a swelling of the petiole close to the leaf; it is somewhat rugose longitudinally and of a grayish color. The course of the petiole is generally very distinct along its upper side, being smooth and of a reddishbrown or yellowish color. The cavity is more or less irregular on account of the woody fibers, which run through the walls of the gall and which are not eaten by the larva. Late in October the larvæ left

the galls and descended about 1/4 inch into the ground in the cage, where they spun small brown, flat, oval cocoons, resembling in shape very much those of the Nepticula on apple. The moths issued during May of the following year.

Neolophus punctellus, n. sp.

Antennæ simple in both sexes, thick, with closely set whorls of short scales which give an appearance of serration; ochreous gray. Labial palpi in the males long, slightly recurved, reaching vertex, closely appressed to the face; in the females much shorter, porrected, terminal joint deflected. The palpi are slightly lighter than the head and thorax, which are covered with light fuscous white-tipped scales; thorax smooth. Fore wings appear pearly, light, whitish fuscous, irregularly and sparsely dotted with black scales; under a lens it is seen that the scales are of different shades of brown, each tipped with very light, nearly white, slate-color, except the few deep black ones, which are slightly metallic. Cilia blackish brown. Venation normal, with 12 veins, 7 to termen just below apex, 8 and 9 stalked, 1b furcate at base. Hind wings ochreous brown, with 8 veins, all separate; 3, 4, 5, 6, and 7 nearly equidistant and parallel from the end of the cell; a forked discal vein to vein 4 and to just below vein 6. Abdomen dark fuscous above. Under side of body whitish. Legs whitish, sprinkled with fuscous; tarsal joints dark brown, tipped with white.

Alar expanse, &, 19 mm.; \, 24 mm.

Hot Springs, Ariz., (E. A. Schwarz); Las Cruces, New Mexico (T. D. A. Cockerell).

Type.-No. 9905, U. S. National Museum.

A pretty species, which can not be confounded with any other American anaphorid, and is easily recognized by the pearlyblack dusted fore wings.

- —Doctor Hopkins remarked on the genera and species of beetles in this country, particularly in the West, which are very closely allied or identical to European forms.
- —Doctor Hopkins reported, also, on the work of the buprestid beetle *Agrilus bilineatus* Web. in oak defoliated by the gipsy moth (*Porthetria dispar* L.), in Massachusetts.
- —Mr. Knab presented some notes on the habits of the larva of *Sayomyia punctipennis* Say, a dipterous insect of the family Corethridæ, allied to the mosquitoes. In the discussion which followed, remarks were made on the habits of the larvæ of